

U.S. CRUDE OIL EXPORTS

Benefits for America's Economy and Consumers



WHY EXPORT CRUDE OIL?

Consumers are among the first to benefit from free trade, and energy is no exception. Access to customers abroad could drive significant new investment in U.S. production, helping to strengthen our energy security, put downward pressure on prices at the pump and create more jobs right here at home. America is in a global race to secure a competitive position in the international market. Nations that act quickly to attract these investments will reap the economic rewards. Fortunately, U.S. workers are in a very good position to win that race.

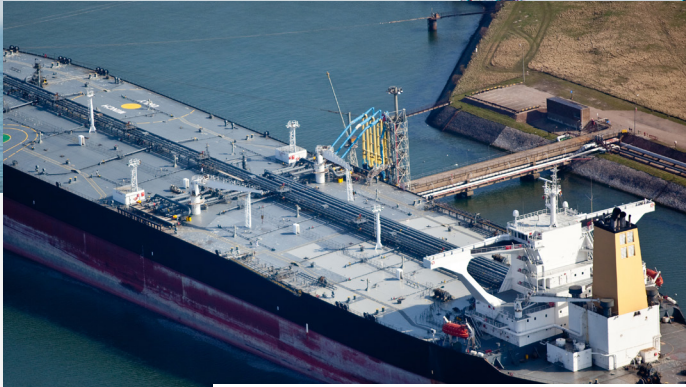
America has steadily increased its crude oil production over the past decade, and in 2015, the country produced 88 percent more crude oil than it did in 2008. Government researchers also estimate that the United States was the world's largest petroleum and natural gas hydrocarbon producer in 2015. This is truly a new era for American energy.

Free trade will unlock more benefits of our energy abundance for U.S. consumers and further strengthen our position as a global energy superpower. And as we grow as an exporter, U.S. energy leadership has the potential to bolster America's allies, expand our geopolitical influence, and strengthen the global energy market against future disruptions.

Lifting the ban on crude oil exports was an important first step, now we must work holistically to modernize America's energy infrastructure and facilitate the efficient flow of resources from producer, to refiner and to customer.

September 2016

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EXPORTS AND IMPORTS

It's often argued that the United States shouldn't be an oil exporter as long as it's an oil importer. This ignores history and also the fundamentals of free trade.

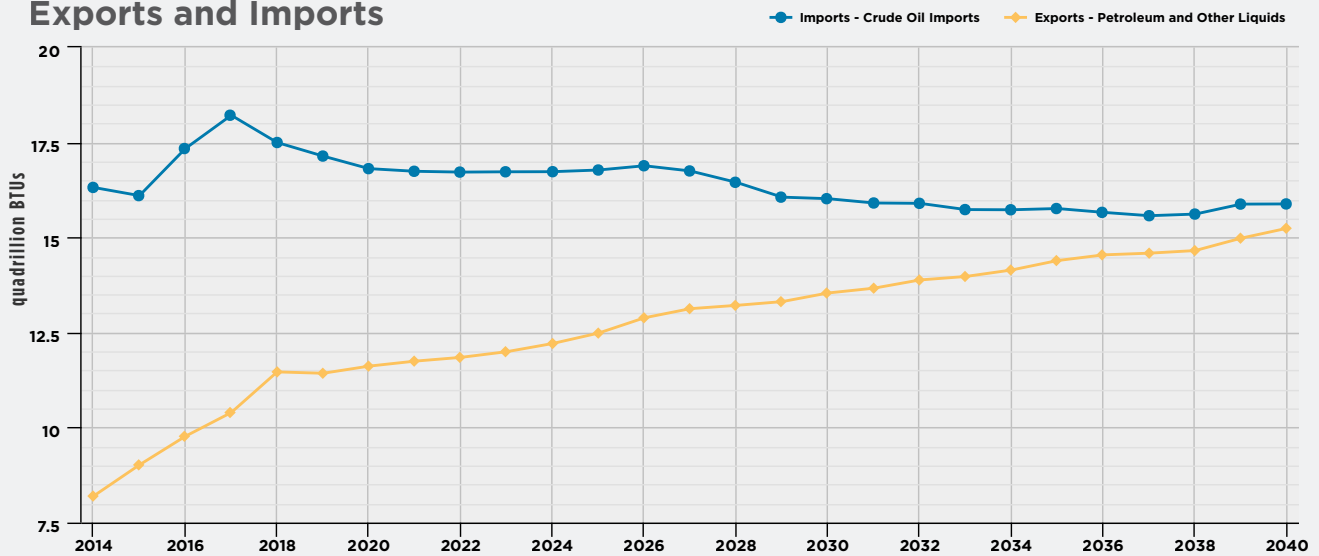
For nearly a century the U.S. was both an exporter and importer of crude oil. Exporting domestically produced crude made the U.S. an important participant in the global crude oil market, which sets crude prices. This ended in the 1970s when, in response to the 1973 oil embargo, Congress imposed a ban on domestic oil exports – a ban lifted in late 2015.

The fact is the U.S. is both an importer and exporter of a number of commodities. From an economics standpoint, the U.S. would be in a stronger position if domestically produced crude could reach the world marketplace as other goods do every day – to the benefit of U.S. producers and consumers. The alternative is a kind of energy isolationism, the shutting-in of domestic production from global markets, depressing prices for that output and eventually discouraging new production. This works against U.S. competitiveness and American consumers.

U.S. refineries are mostly designed to process heavy (rather than light) crudes. Essentially, all current and projected increases in U.S. crude production have been in light sweet crude, meaning that the U.S. has much to gain by exporting this light crude as exporting light sweet crudes and importing heavier crudes better aligns existing refinery configurations with crude type.

Additionally, it often makes sense to export a surplus of expensive, light oil from one region and import cheaper, heavy oil in another – rather than ship more expensive oil cross-country. This is especially true in the absence of sufficient infrastructure to efficiently transport crude to the refineries that could use it. Current projections show U.S. crude oil imports continuing to fall even as exports of oil, petroleum products and other liquids rise.

Exports and Imports



Source: U.S. Energy Information Administration



EXPORTS AND CONSUMERS

Oil Exports Would Put Downward Pressure on U.S. Gasoline Prices.

Summary of Major Economic Studies	Estimated Decline in U.S. Price per Gallon of Motor Fuels
Resources for the	1.7 to 4.5 cents
IHS	8 cents average
ICF	Up to 3.8 cents (2.3 cents average)
Brookings & Nera	Up to 12 cents (9 cents average)
Aspen & MAPI	Up to 9 cents
GAO	1.5 to 13 cents
CBO	5 to 10 cents
Columbia University	Up to 12 cents
EIA	1 cents*

*Assumes non-U.S. oil suppliers partially reduce production in response

U.S. Crude Oil Export Decision: Assessing the Impact of the Export Ban and Free Trade on the U.S. Economy, (IHS, May 2014)

"Lifting the 1970's-era restrictions on U.S. crude oil exports would lead to further increases in domestic oil production, resulting in lower gasoline prices while supporting nearly 1 million additional jobs at the peak . . . It would lead to a total of \$746 billion in additional investment during the study period (2016-2030) and an average of 1.2 million barrels per day (b/d) more oil production per year, the study finds. The additional crude oil supply would lower gasoline prices by an annual average of 8 cents per gallon, the study says. The combined savings for U.S. motorists

during the 2016-2030 period would translate to \$265 billion compared to a situation where the restrictive trade policy remains in place. The increased economic activity resulting from the rise in crude production would support an average of 394,000 additional U.S. jobs per, with highs of 811,000 additional jobs supported in 2017 and a peak of 964,000 jobs in 2018."

Navigating the U.S. Oil Export Debate (Columbia University, January 2015)

"[Permitting exports] will likely decrease the price Americans pay for gasoline, diesel and other petroleum products and benefit the US economy as a whole. . . Allowing exports would make the US more resilient, not less, to supply disruptions elsewhere in the world."

Changing Crude Oil Markets: Allowing Exports Could Reduce Consumer Fuel Prices, and the Size of the Strategic Reserves Should Be Reexamined, (Government Accountability Office (GAO), October 2014)

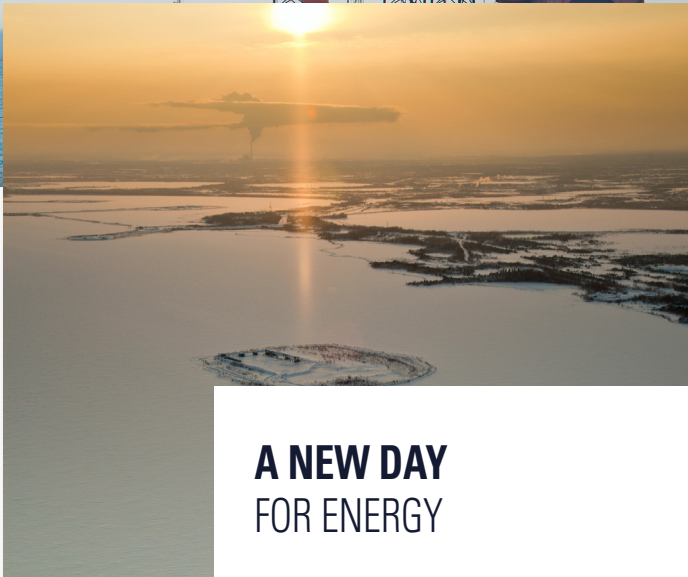
"Removing export restrictions is expected to increase the size of the economy, with implications for employment, investment, public revenue, and trade [C]onsumer fuel prices, such as gasoline, diesel, and jet fuel, could decrease as a result of removing crude oil export restrictions."

Effects of Removing Restrictions on U.S. Crude Oil Exports, (Energy Information Administration (EIA), September 2015)

"Petroleum product prices in the United States, including gasoline prices, would be either unchanged or slightly reduced by the removal of current restrictions on crude oil export... In the HOG and HOG/LP cases, the removal of crude oil export restrictions results in higher domestic crude prices, which leads to increased domestic production that adds to world crude supply and thereby reduces Brent crude prices and petroleum product prices."

Ending the Export Ban: What It Means for US Gasoline Prices, (Resources for the Future, February 2014)

"Our basic finding is that the efficiency of global refinery operations would be improved a little if the ban on US exports of crude oil were to be lifted. And, accordingly, gasoline production would go up and its price in the United States would fall."



A NEW DAY FOR ENERGY

The United States is once again an exporter of crude oil, with a January 2016 shipment marking the first freely traded U.S. crude in about four decades – made possible by congressional legislation that President Obama signed to end a 1970s-era ban on exports.

The potential benefits of exporting oil are significant for U.S. security, trade, energy production and consumers:

- » Creation of up to **300,000 jobs in 2020**, according to an ICF International study.
- » An increase of **\$38.1 billion** in U.S. GDP in 2020, ICF says.
- » Increased domestic oil production of up to **500,000 barrels per day by 2020**.

The U.S. is taking the first steps toward resuming its historical role as a global producer and supplier. The United States' restored opportunity to be a shaper of global crude markets has a number of potential benefits, at home and with America's friends overseas – in a world in which oil and natural gas is and will be leading energy sources, as the BP projection above shows.

Domestically, U.S. oil production will have new access to markets with the removal of disincentives to production posed by the export ban. A number of states, such as Colorado, could realize new opportunities through oil exports. The Denver Post reports:

"...long-term, as prices recover and more shipping infrastructure gets built, Colorado petroleum producers could benefit. And they would need to sell only a fraction of their output abroad to catapult into the ranks of the state's top exporters. ... Gaining a whole new product category with lasting appeal in foreign markets excites trade advocates in the state. "We are starting to gather people from our network to put together an interest group of companies that would like to talk about global energy,"
World Trade Center Denver president Karen Gerwitz said.

ClearView Energy's Kevin Book says the United States' new exporting posture should be seen over the long haul.
Book to E&ETV:

"[F]rom a policy standpoint, it's a significant change. We're adjusting a scarcity-based energy policy for an age of adequacy, recognizing that the world has changed in four decades. For Congress, that's a big step. ... This is really a long-term signal. It says to U.S. producers, if you drill the wells, if you make the investment, there will be a market for you again when overall global prices recover."

Primary Energy World Consumption (million tonnes oil equivalent) SOURCE: BP, Statistical Review of World Energy, 2015.

